

For the entire Commonwealth this gives a coast-line of 12,210 miles, and an average of 244 square miles for one mile of coast-line. According to Strelbitski, Europe has only 75 square miles of area to each mile of coast-line, and, according to recent figures, England and Wales have only one-third of this, viz., 25 square miles.

(ii.) *Historical Significance of Coastal Names.* It is interesting to trace the voyages of some of the early navigators by the names bestowed by them on various coastal features—thus Dutch names are found on various points of the Western Australian coast, in Nuyts' Archipelago, in the Northern Territory, and in the Gulf of Carpentaria; Captain Cook can be followed along the coasts of New South Wales and Queensland; Flinders' track is easily recognisable from Sydney southwards, as far as Cape Catastrophe, by the numerous Lincolnshire names bestowed by him; and the French navigators of the end of the eighteenth and the beginning of the nineteenth century have left their names all along the Western Australian, South Australian, and Tasmanian coasts.

**5. Hydrology of Australia.**—It is not the function of this Year Book to furnish in any one number a complete geographical account of Australia, but, as previously indicated (Year Book No. 1), it is intended each year to give the most complete available information concerning some special geographical element. In this number an enumeration of the rivers and their approximate lengths is selected.

On the whole, Australia is a country with a limited rainfall. This is immediately evident on studying its river systems, its lakes, and its artesian areas. Its one large river system is that of the Murray and Darling Rivers, of which the former stream is the larger and more important. Many of the rivers of the interior run only after heavy rains. Depending almost entirely on rainfall, a consequence of the absence of high mountains, they drain large areas with very varying relation as between rainfall and flow. Thus it has been estimated that not more than 10 per cent. of the rainfall on the "catchment-area" of the Darling River above Bourke (N.S.W.) discharges itself past that town. The rate of fall is often very slight.

(i.) *Rivers.* The rivers of Australia may be divided into two great classes, those of the coastal plains, with moderate rates of fall, and those of the central plains, with very slight fall. Of the former not many are navigable for any distance from their mouths, and some are difficult of access or inaccessible from the sea on account of bars.

The two longest rivers of the northern part of the eastern coast are the Burdekin, discharging into Upstart Bay, with a catchment area of 53,500 square miles; and the Fitzroy, which reaches the sea at Keppel Bay, and drains about 55,600 square miles. The Hunter is the largest coastal river of New South Wales, draining about 11,000 square miles, before it empties itself at Newcastle. The Murray River, with its great tributary, the Darling, drains a considerable part of Queensland, the major part of New South Wales, and a large part of Victoria. It debouches into the arm of the sea known as Lake Alexandrina, on the eastern side of the South Australian coast. The total length of the Murray is about 1600 miles, 400 being in South Australia, and 1200 constituting the boundary between New South Wales and Victoria.<sup>1</sup>

The total length of the Darling-Murray from the source of the Darling to the mouth of the Murray is 2310 miles.<sup>1</sup>

The rivers on the north-west coast of Australia (Western Australia) are of considerable size, e.g., the Murchison, Gascoyne, Ashburton, Fortescue, DeGrey, Fitzroy, Drysdale, and Ord. So also are those in the Northern Territory, e.g., Victoria and Daly. The former of these, estimated to drain 90,000 square miles, is said to be navigable by the largest vessels for 50 miles.

The rivers on the Queensland side of the Gulf of Carpentaria are also of considerable size, e.g., Gregory, Leichhardt, Cloncurry, Gilbert, Mitchell, etc.

Owing to the small fall of many of the interior rivers, in wet seasons they may flood hundreds of miles of country, while in dry seasons they form a mere succession of water-

1. These distances were differently given in Year Book No. 1, but have since been measured on large scale maps, with the results as shewn.

holes, or are entirely dry. It is this fact that explains the apparently conflicting reports of the early explorers, one regarding the interior as an inland sea, and another as a desert.

The rivers of Tasmania have short and rapid courses, as the configuration of the territory indicates.

The following table<sup>1</sup> gives a list of the principal rivers in each State together with their approximate lengths, and shews moreover the tributary systems and the lengths of the tributaries:—

A comparison of the different sources of official information as to the lengths of the rivers of the Commonwealth shewed considerable discrepancies, even in important and well-known rivers. These discrepancies were relatively so large that it seemed desirable to re-estimate the lengths by using the largest scale maps available, and following all the bends of the rivers. This was carefully done for all the States by two methods—the mean of the two results, differing very slightly, being taken.

In the case of Queensland, South Australia, and Tasmania, the Lands Departments of those States were good enough to supply the lengths: where these substantially agreed with those computed as indicated, the lengths furnished were adopted. In the very few cases where the discrepancy was large, the result computed in the Bureau was retained in preference.

For purposes of reference, the following table has been prepared shewing the magnitude of the discrepancy:—

#### COMPARISON OF PUBLISHED LENGTHS OF VARIOUS RIVERS IN THE COMMONWEALTH.

River.	C'wealth Official Year Book, No. 2.	Statistical Account of Aust. & N.Z., 1903-4. (Coghlan.)	Notes on the Colony of Victoria, 1875. (Hayter.)	Victorian Year Book, 1906-7. (Drake.)
	Miles.	Miles.	Miles.	Miles.
Murray (between Vict. & N.S.W.)	1,200	1,250	670	980
Murray (total length) ...	1,600	1,719	...	1,300
Clarence ... ..	190	240	...	...
Macleay ... ..	160	200	...	...
Manning ... ..	150	100	...	...
Hunter ... ..	340	over 200	...	...
Hawkesbury ... ..	335	over 390	...	...
Shoalhaven ... ..	220	260	...	...
Murrumbidgee ... ..	1,050	1,350	...	...
Lachlan ... ..	850	700	...	...
Snowy (in New South Wales) ...	170	180	...	...
Snowy (in Victoria) ... ..	95	120	85	...
Mitta Mitta ... ..	125	175	90	175
Ovens ... ..	110	140	100	140
Goulburn ... ..	280	345	230	345
Campaspe ... ..	100	150	85	150
Loddon ... ..	155	225	150	225
Avoca ... ..	140	163	130	163
Wimmera ... ..	155	228	135	228
Yarra Yarra ... ..	115	150	90	150
Hopkins ... ..	135	155	110	155
Glenelg ... ..	280	280	205	281
Barwon ... ..	75	...	70	95
Werribee ... ..	60	...	55	70
Saltwater ... ..	65	...	70	170
La Trobe ... ..	70	...	90	140
Macalister ... ..	110	...	65	115
Thompson ... ..	60	...	...	100
Mitchell ... ..	60	...	60	80
Tambo ... ..	90	...	85	120

1. The information is given in much greater detail than is possible on any but the largest maps, and is, therefore, not generally available. The series of Year Books will thus furnish detailed information of the several geographical features of Australia.

## APPROXIMATE LENGTHS OF PRINCIPAL RIVERS OF THE COMMONWEALTH.

R. signifies tributary on right bank, and L. on left bank.

5A. New South Wales.—Starting at the south-western extremity and going easterly, northerly, and westerly.

	MILES		MILES
Murray River (total length between New South Wales and Victoria) ...	1,200	—Murrumbidgee River (continued)	
R. Anabranch of Darling ...	320	L. Goodradigbee River ...	60
R. Darling River (joins Murray 150 miles from S.A. border) ...	1,760	R. Molonglo River ...	90
L. Talyawalka (Anabranch) ...	260	R. Umaralla Creek ...	90
R. Warrego River (joins Darling 950 miles from mouth), N.S.W. portion ...	130	R. Kyalite Edward River ...	280
R. Irrara Creek ...	60	L. Wakool River ...	240
R. Culgoa River (joins Darling 1070 miles from mouth), N.S.W. portion ...	130	R. Yarrien Creek ...	100
L. Birrie River ...	110	R. Niemur River ...	90
L. Bogan River (joins Darling 1075 miles from mouth) ...	370	L. Merran Creek ...	60
R. Duck River ...	70	R. Moulamein or Billabong Creek ...	400
R. Gunningbar Creek ...	70	R. Yanko Creek ...	190
L. Bulbodney Creek ...	60	R. Tuppal Creek ...	60
R. Bokhara River ...	160	R. Swampy Plain River ...	40
L. Marra Creek ...	180	Snowy River (upper portion called Eucumbene River), N.S.W. portion ...	170
L. Crooked Creek ...	100	R. Mumbra Creek ...	30
L. Macquarie River (joins Darling 1260 miles from mouth) ...	500	L. Delegete Creek ...	60
R. Castlereagh River ...	340	L. McLaughlin River ...	60
L. Nedgera Creek ...	80	L. Bobundara Creek ...	35
L. Mowlina Creek ...	50	R. Wullwye Creek ...	30
R. Marthagay Creek ...	200	Wallagaraugh River ...	30
R. Merri Merri Creek ...	90	Towamba River ...	50
R. The Big Warrambool River ...	100	Bega or Bemboka River ...	55
L. Namoi River (joins Darling 1360 miles from mouth) ...	430	L. Brogo River ...	35
R. Pian Creek ...	120	Tuross River ...	70
L. Baradine Creek ...	110	Clyde River ...	80
L. Dubbo Creek ...	50	Shoalhaven River ...	220
L. Peel River ...	50	R. Mongarlowe River ...	40
L. Thalaba Creek ...	90	Hawkesbury River ...	335
L. Meei or Gwydir River (joins Darling 1460 miles from mouth) ...	350	L. Colo River ...	60
L. Moomin Creek ...	110	R. Capertee River ...	60
L. Boomi River ...	110	R. Nepean River ...	45
L. Gil Gil Creek ...	130	R. Nattai River ...	35
L. Whalan Creek ...	110	R. Cox's River ...	80
L. Croppa Creek ...	70	Hunter River ...	340
L. Macintyre River (to junction of Dumaresq River) ...	180	L. Williams River ...	100
R. Severn River ...	120	L. Paterson River ...	100
R. Murrumbidgee River (joins Murray 430 miles from S.A. border) ...	1,050	R. Goulburn River ...	140
R. Lachlan River (joins Murrumbidgee 130 miles from mouth) ...	850	L. Wybang Creek ...	50
R. Marrowie Creek ...	100	L. Kria Creek ...	50
R. Willandra Billabong Creek ...	250	R. Dart Brook ...	40
L. Euglo Creek ...	120	R. Isis River ...	70
R. Goobang Creek ...	140	Karuah River ...	50
R. Mandagery Creek ...	80	Myall River ...	30
L. Boorowa River ...	80	Wollomba River ...	45
R. Abercrombie River ...	110	Manning River ...	150
R. Crookwell River ...	35	L. Dingo Creek ...	40
L. Old Man Creek ...	40	R. Barrington River ...	75
L. Bullenbung Creek ...	40	L. Nowendoc River ...	65
R. Houlaghan's Creek ...	50	L. Barnard River ...	90
L. Yaven Yaven Creek ...	40	Hastings River ...	110
R. Billabong Creek ...	35	L. Maria River ...	30
L. Adelong Creek ...	35	R. Ellenborough River ...	30
L. Tumut River ...	90	Macleay River ...	160
		R. Apsley River ...	90
		L. Chandler River ...	55
		Bellinger River ...	60
		Clarence River ...	190
		R. Orara River ...	80
		R. Nymboida River ...	110
		L. Mann River ...	90
		R. Timbara River ...	95
		Richmond River ...	160
		Tweed River ...	40
		Narran River (N.S.W. portion) ...	100
		Paroo River (N.S.W. portion) ...	103

5B. Victoria.—Starting at the north-eastern extremity and going westerly, southerly, and easterly.

Murray River (total length between New South Wales and Victoria) ...	1,200	—Mitta Mitta River (continued)	
L. Corryong Creek ...	45	R. Gibbo Creek ...	30
L. Cudgewa Creek ...	50	L. Wombat Creek ...	20
L. Cooyatong Creek ...	20	L. Bundarra Creek ...	30
L. Mitta Mitta River ...	125	L. Kiewa River ...	70
R. Tallangatta Creek ...	30	R. Big River ...	40
L. Little Snowy Creek ...	20	L. Indigo Creek ...	25
L. Snowy Creek ...	25	L. Doma Mungi River ...	40
		L. Ovens River ...	110

—Ovens River (continued)		MILES			MILES
L. King River	...	75	Shaw River	...	25
R. Hodgson's Creek	...	20	Moyne River	...	40
L. Whorouly Creek	...	25	Merri River	...	30
L. Buffalo River	...	50	L. Drysdale Creek	...	20
R. Myrtle Creek	...	20	Hopkins River	...	135
L. Buckland River	...	30	L. Mount Emu Creek	...	170
L. Tullah Creek	...	20	L. Salt Creek...	...	25
L. Broken Creek	...	125	R. Gray's Creek	...	20
R. Black Creek	...	50	R. Bushy Creek	...	20
L. Tsheeca Creek	...	20	Fiery Creek	...	75
L. Goulburn River	...	280	Curdie's Creek	...	55
R. Broken River	...	105	Gellibrand River	...	65
R. Stony Creek	...	40	Thomson's Creek...	...	20
L. Seven Creeks	...	50	Barwon River	...	75
R. Castle Creek	...	40	L. Moorabool River	...	35
R. Muddy Creek	...	20	L. Yarrowee River	...	50
R. Hughes Creek	...	40	L. Warrambune Creek	...	60
L. Sugarloaf Creek	...	20	Little River	...	30
L. Dabyminga Creek	...	25	Werribee River	...	60
L. Yea River	...	35	L. Lerderderg River	...	25
L. Acheron River	...	30	Yarra Yarra River	...	115
R. Delatite River...	...	55	R. Saltwater River	...	65
L. Big River	...	20	R. Plenty River	...	30
R. Howqua River	...	40	L. Dandenong Creek...	...	30
R. Jamieson River	...	25	R. Watts River	...	20
L. Campaspe River	...	100	Bass River	...	35
R. Mt. Pleasant Creek	...	20	Powlett River	...	30
L. Coliban River	...	45	Bruthen Creek	...	20
L. Loddon River	...	155	Merriman's Creek	...	55
R. Muirabit River	...	25	La Trobe River	...	70
R. Pyramid Creek	...	95	L. Thompson River	...	60
L. Bullabul Creek	...	25	L. Macalister River	...	110
R. Bradford Creek	...	20	Avon River	...	50
L. Bet Bet Creek	...	40	Perry River	...	35
Avoca River	...	140	Tom's River	...	20
L. Cherry Tree Creek	...	20	Mitchell River	...	60
Tyrrell Creek	...	85	L. Wentworth River	...	55
Avon River	...	75	L. Dargo River	...	75
L. Richardson River	...	30	L. Wonnangatta River	...	85
Yarriambiack Creek	...	80	L. Wongungarra River	...	35
Wimmera River	...	155	Nicholson River	...	45
L. Norton Creek	...	30	Tambo River	...	90
L. Mackenzie River	...	45	L. Little River	...	20
L. Concongella Creek	...	25	Boggy Creek	...	30
Glenelg River	...	280	Snowy River (Victorian portion)	...	95
L. Crawford River	...	40	R. Murrindah River	...	30
L. Stokes River	...	30	L. Broadbent Creek	...	20
L. Wannon River	...	150	L. Mountain Creek	...	20
L. Chetwynd River	...	25	L. Jingallala River	...	35
L. Mather's Creek	...	20	R. Toonginbooka River	...	30
Surry River	...	25	Bemm River	...	20
Fitzroy River	...	25	Cann River	...	25
L. Darlot's Creek	...	25	Thurra River	...	20
Enumerala River	...	70	Genoa River	...	50

5C. **Queensland.**—Starting at the north-western extremity and going easterly, northerly, southerly, and westerly.

Settlement Creek	...	50	Albert River (continued)		
Lagoon Creek	...	100	R. Landsborough Inlet	...	12
Cliffdale Creek	...	100	Leichhardt River	...	300
Nicholson River	...	130	R. Gorge Creek	...	20
R. Gregory River	...	160	R. Charley Creek	...	24
R. Duriel Creek	...	16	L. Paroo Creek	...	32
R. Goonooma Creek	...	32	L. Surprise Creek	...	28
L. Ixion Creek	...	20	R. Prospector Creek	...	29
L. Verdon Creek	...	20	R. Cabbage Tree Creek	...	32
R. O'Shanassy River	...	80	L. Coppermine Creek	...	26
R. Morstone Creek	...	14	L. St. Paul Creek	...	24
L. Youl Creek	...	8	L. Eureka Creek	...	16
R. Harris Creek	...	30	L. Mistake Creek	...	56
R. Thornton River	...	40	L. Gunpowder Creek	...	96
L. Thornton Creek	...	34	L. Myally Creek	...	45
L. Magenta Creek	...	34	L. Sandy Creek	...	52
R. Seymour River	...	45	R. Mittagoody Creek	...	24
R. Victor Creek	...	10	L. Fiery Creek	...	86
R. Police Creek	...	32	R. Alexandra River	...	110
L. Macadam Creek	...	20	R. Lagoon Creek	...	30
R. Tozer Creek	...	8	Disaster Inlet	...	25
L. Lawn Hill Creek	...	112	Morning Inlet	...	22
L. Elizabeth Creek	...	72	R. M. Creek	...	25
Albert River	...	40	L. Punchbowl Creek	...	18
L. Beames Creek	...	48	Flinders River	...	520
R. Barclay River	...	35	L. White Mountain Creek	...	12
R. Twelve Mile Creek	...	36	R. Galah or Porcupine Creek	...	60
R. Saltwater Arm	...	6	R. Canterbury Creek...	...	16
R. Millar Creek	...	52	R. Betts Gorge Creek...	...	44

	MILES		MILES
Flinders River (continued)		Accident Inlet (continued)	
R. Stewart's Creek ...	30	R. Crooked Creek ...	22
L. Walker Creek ...	64	L. Fitzmaurice Creek ...	30
L. Eastern Creek ...	35	Smithburne River ...	40
R. Dutton River ...	100	Van Diemen River ...	25
R. Chasin Creek ...	22	Gilbert River ...	312
R. Pine Tree Creek ...	28	R. Styx River ...	10
L. Station Creek ...	12	R. Granite Creek ...	18
R. Camulla Creek ...	14	L. Mica Schist Creek ...	15
R. Deepwater Creek ...	10	L. Conglomerate Creek ...	12
R. Spinifex Creek ...	14	R. Percy River ...	24
R. Yanko Creek ...	28	R. Robertson River ...	76
R. Tunis Creek ...	18	L. Left branch Robertson River ...	10
R. Alexander Creek ...	36	L. Oaky Creek ...	17
R. Hazlewood Creek ...	34	L. Little Robertson River ...	20
R. Stawell River ...	150	L. Agate Creek ...	24
R. McDougall Creek ...	26	R. Townley Creek ...	12
R. Rokehurst Creek ...	24	R. Western Creek ...	10
L. Poison Creek ...	16	R. Crooked Creek ...	5
R. Loth Creek ...	25	L. Langdon River ...	35
R. Woolgar River ...	60	L. B. Creek ...	6
L. Patience Creek ...	24	R. Black Gin Creek ...	12
L. Hampstead Creek ...	26	L. Little River ...	32
L. Cecil Creek ...	16	R. Einasleigh River ...	260
L. Alick Creek ...	124	R. Bundock Creek ...	18
L. Rupert Creek ...	57	R. Lee Creek ...	40
L. Cloncurry River ...	280	R. Lagoon Creek ...	24
L. Maggie Creek ...	16	L. Copperfield River ...	100
R. Farley Creek ...	12	R. Crooked Creek ...	5
R. Gorge Creek ...	8	L. Dumbano Creek ...	10
L. Sandy Creek ...	16	R. Middle Creek ...	12
L. Spring Creek ...	30	L. Christinas Hill Creek ...	12
R. Florence Creek ...	26	R. East Creek ...	15
L. Cattle Creek ...	18	L. Oak River ...	10
L. Malbon River ...	45	L. McMillan Creek ...	9
L. Limestone Creek ...	10	R. Junction Creek ...	45
L. Duck Creek ...	22	R. Elizabeth Creek ...	60
R. Martin Creek ...	20	R. Parallel Creek ...	33
L. Slaty Creek ...	18	L. Cattle Creek ...	24
R. Snake Creek ...	20	L. Silent Creek ...	23
L. Chinaman Creek ...	16	L. Etheridge River ...	96
L. Table Creek ...	20	L. Delaney River ...	25
R. Gipsy Creek ...	24	L. Sandy Creek ...	25
R. Williams River ...	100	R. Middle Creek ...	60
L. Roberts Creek ...	6	Vanrook Creek ...	95
L. Elder Creek ...	22	Macaroni Creek ...	53
L. Canal Creek ...	21	Staaten River ...	170
L. Eliza Creek ...	14	R. Cockburn Creek ...	50
L. Mount Margaret Creek ...	20	L. Pandanus Creek ...	70
R. Eastern Creek ...	120	L. Emu Creek ...	62
L. Sadowa Creek ...	64	R. Maramie Creek ...	48
L. Gilliat River ...	110	R. Bloodwood Creek ...	36
R. Wild Duck Creek ...	34	L. Pelican Creek ...	60
L. McKinlay River ...	90	Nassau River ...	85
L. Dingding Creek ...	10	R. Dunbar Creek ...	12
R. Rangeview Creek ...	18	R. Scrutton River ...	45
L. Boorama Creek ...	32	L. Rocky Creek ...	19
R. Martin Creek ...	20	Magnificent Creek ...	42
L. Nora Creek ...	46	Mitchell River ...	350
L. Holy Joe Creek ...	44	R. Big Mitchell Creek ...	5
L. Fullarton River ...	80	R. Little Mitchell Creek ...	6
L. Dugald River ...	120	L. Granite Creek ...	6
R. Middle Creek ...	62	L. Dora Creek ...	4
R. Coralla River ...	130	L. Black Gin Creek ...	6
L. Cameron River ...	25	R. Rifle Creek ...	30
R. Malakoff Creek ...	20	R. Station Creek ...	6
R. Tommy Creek ...	38	R. Mary Creek ...	7
L. Topsy Creek ...	12	R. McLeod River ...	18
L. Dismal Creek ...	80	R. Spencer Creek ...	8
R. Branch Creek ...	36	R. Campbell Creek ...	8
R. Saxby River ...	220	R. Desailly Creek ...	4
L. Express Creek ...	56	L. Lizzie Creek ...	8
R. Mill Mill Creek ...	42	L. Wolstencroft Creek ...	7
L. Cockatoo Creek ...	25	L. Hodgkinson River ...	54
L. Wondoola Creek ...	26	R. Columbia Creek ...	3
L. Armstrong Creek ...	32	R. Explorer Creek ...	2
Bynoe River ...	40	L. Spring Creek ...	2
Norman River ...	260	R. Caledonia Creek ...	9
L. Spear Creek ...	86	R. Deep Creek ...	2
R. Clara River ...	145	L. Little River ...	8
R. Yappar River ...	135	L. Mt. Mulligan Creek ...	5
L. Brown Creek ...	58	R. Eastern Hodgkinson ...	15
R. Clarina Creek ...	57	L. Little Watson Creek ...	14
R. Macrossan River ...	25	R. St. George River ...	60
R. Carron River ...	100	R. Right-hand branch St. George R. ...	18
R. Walker Creek ...	87	R. Limestone Creek ...	12
Brannigan Creek ...	20	L. Dry Creek ...	20
Accident Inlet ...	10	R. Little Mitchell River ...	20

	MILES		MILES
Mitchell River (continued)		Bizant River	16
R. Sandy Creek	16	Normanby River	162
R. Rocky Creek	8	L. Lakes Creek	16
L. Walsh River	180	R. East Normanby River	48
L. Emu Creek	40	L. Laura River	70
L. Brown Creek	54	L. Mosman River	30
L. Lynd River	170	L. Little Laura River	36
L. Mero Creek	15	Normanby River (continued)	
L. Fossil Brook Creek	25	L. Kennedy River	70
R. Pinnacle Creek	26	R. Jack River	16
R. Tate River	80	Marrett River	12
R. California Creek	20	Jeannie River	36
L. Rocky Tate River	30	Starcke River	20
R. Palmer River	190	McIvor River	32
R. Little Palmer River	13	L. Morgan River	12
L. Right-hand branch Palmer R.	15	Endeavour River	30
R. Left-hand branch Palmer River	32	L. North branch	11
L. Sandy Creek	34	L. Right-hand branch	9
R. King Creek	24	Annan River	30
R. Alice River	70	R. Treveethan Creek	10
Coleman River	140	Esk River	7
Edward River	60	Bloomfield River	30
Holroyd River	16	Daintree River	26
Lukin River	140	R. Stewart Creek	6
Kendal River	70	Saltwater Creek	12
Archer River	170	Mossman River	12
L. Croll Creek	20	R. South Mossman River	8
L. Bourne Creek	18	Mowbray River	10
R. Irvine Creek	16	Barron River	70
R. Geikie Creek	32	L. Mazzlin Creek	11
R. Picaninny Creek	36	R. Severin Creek	10
L. Coen River	65	L. Rocky Creek	14
L. Running Creek	20	R. Tinaroo Creek	13
Watson River	65	L. Granite Creek	20
R. Lagoon Creek	16	R. Clohesy River	14
R. Say Creek	18	L. Flaggy Creek	15
L. Gumbol Creek	25	Trinity Inlet	5
L. Kokialah Creek	15	Russell River	38
Embley River	28	L. Babinda Creek	11
R. Kurracoo Creek	18	L. Mulgrave River	44
R. Brownstone Creek	6	L. Little Mulgrave River	8
R. Spring Creek	7	R. Tringilburra Creek	16
L. Hey River	12	Johnstone River (North branch)	60
Mission River	24	Johnstone River (South branch)	30
R. Myall Creek	30	Moresby River	10
Pennefather Creek	10	Liverpool Creek	20
Batavia River	160	Maria Creek	8
R. Sefton Creek	20	Hull River	10
L. Clayhole Creek	16	Tully River	65
L. Capsize Creek	28	R. Davidson River	8
R. Schramm Creek	10	L. Banyan Creek	8
L. Lydia Creek	24	Murray River	30
L. Cox Creek	46	Dallachy Creek	9
R. Nimrod Creek	27	Wreck Creek	10
Ducie River	30	Kennedy Creek	14
R. Palm Creek	24	R. Meunga Creek	6
R. North Alice Creek	44	R. Attie Creek	5
Dulhunty River	52	Five Mile Creek	5
Skardon River	36	Damper Creek	4
R. McDonnell Creek	6	Herbert River	150
Jardine River	80	R. Wild River	30
L. McHenry River	26	L. Millstream Creek	28
Cowal Creek	12	L. Blunder Creek	42
Kennedy River	20	R. Rudd Creek	18
Escape River	10	L. Blencoe Creek	6
Henderson River	10	R. Garrawalt Creek	16
Macmillan River	44	R. Stone River	28
Pascoe River	55	Palm Swamp	21
Lockhart River	28	Trebonne Creek	26
L. Greyhound Creek	10	Saltwater Creek	10
Nesbit Creek	12	Rollingstone Creek	7
R. Leo Creek	9	Leichhardt Creek	9
Chester River	8	Alice River	20
Rocky Creek	16	Black River	17
Massy Creek	12	Bohle River	15
Dinner River	20	Ross River	30
L. Breakfast Creek	20	Alligator Creek	12
Stewart River	45	Crocodile Creek	7
L. Station Creek	7	Houghton River	55
L. Little Stewart Creek	6	L. Reid River	20
Balcutha River	28	L. Serpentine Creek	18
Annie River	40	Barratta Creek	48
North Kennedy River	76	Plantation Creek	19
R. Therimburi Creek	10	Burdekin River	440
L. Station Creek	23	R. Anthill Creek	24
L. Sandy Creek	14	R. Reedy Creek	10
L. Morehead River	65	R. Dry Creek	26
R. Hann River	52	R. Gray Creek	40
R. Wangow Creek	20		

# APPROXIMATE LENGTHS OF PRINCIPAL RIVERS.

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Burdekin River (continued)	MILES	Dawson River (continued)	MILES
R. Clarke River	84	R. Lonesome Creek	35
L. Gregory River	20	R. Granville Creek	32
R. Yates Creek	36	R. Herbert Creek	24
L. Broken River	35	I. Mackenzie River	170
R. Emu Creek	24	R. Comet River	80
R. Maryvale Creek	38	R. Brown River	50
L. Douglas Creek	25	R. Arcadia Creek	25
L. Running River	16	R. Clematis Creek	45
L. Star River	18	L. Christmas Creek	23
R. Big Star River	28	L. Consuelo Creek	42
L. Little Star River	24	L. Meteor Creek	60
R. Basalt River	80	R. Planet Creek	85
R. Lolworth Creek	84	R. Humboldt Creek	38
L. Keelbottom Creek	42	L. Minerva Creek	42
R. Dillon Creek	40	R. Sirius Creek	34
L. Fanning River	35	L. Nogoa River	180
R. Broughton River	24	L. Claude River	48
L. Pandanus Creek	25	R. Buckland Creek	46
L. Kirk River	20	L. Balmy Creek	34
R. Suttor River	190	R. Vandyke Creek	92
R. Rockingham Creek	20	R. Separation Creek	16
L. Suttor Creek	44	L. Anakie Creek	10
L. Eaglefield Creek	50	R. Stony Creek	20
R. Verbena Creek	20	L. Theresa Creek	130
L. Logan Creek	45	L. Crinum Creek	16
L. Belyando River	205	R. Burngrove Creek	30
L. Native Companion Creek	125	R. Blackwater Creek	50
L. Alpha Creek	80	L. Cooroora Creek	34
L. Dunda Creek	62	L. Roper's Creek	56
L. Carmichael Creek	48	R. Parker Creek	20
R. Mistake Creek	122	L. Junee Creek	30
L. Bully Creek	48	L. Isaacs River	152
L. Cape River	160	R. Grosvenor Creek	31
R. Amelia Creek	42	L. North Creek	33
L. Broadley Creek	50	R. Campbell Creek	45
L. Campaspie River	96	L. Develin Creek	48
R. Blowhard Creek	33	R. Rolf Creek	44
L. Rollston River	38	L. Connor's River	56
R. Bowen River	96	R. Murray Creek	22
R. Broken River	48	L. Collaroy Creek	20
R. Bogie River	60	R. Funnel Creek	68
R. Kirknie Creek	10	L. Melaleuca Creek	36
Wangaratta Creek	13	R. Gogango Creek	36
Rocky Pond Creek	14	R. Emu Creek	12
Molongle Creek	20	R. Moah Creek	17
Elliot River	30	R. Rosewood Creek	15
Euri Creek	30	L. Glenroy Creek	11
Don River	52	L. Marlborough Creek	24
Duck Creek	14	L. Princhester Creek	18
Edenlassie Creek	17	L. Planted Creek	15
Gregory River	16	L. Canoon Creek	8
Proserpine River	30	L. Alligator Creek	44
O'Connell River	28	L. Moore's Creek	6
L. Andromache River	24	R. Gavial Creek	34
Blackrock Creek	17	L. Nankin Creek	13
Murray Creek	28	Raglan Creek	54
Victor Creek	7	Calliope River	52
Seaforth Creek	6	L. Alma Creek	12
Pioneer River	40	R. Running Creek	10
L. Cattle Creek	22	L. Harper Creek	12
Baker's Creek	13	R. Oaky Creek	18
Sandy Creek	28	L. Larcombe Creek	21
Alligator Creek	17	R. Double Creek	16
Plane Creek	15	R. Clyde Creek	14
Marion Creek	14	Auckland Inlet	3
Basin Creek	15	South Trees Inlet	12
West Hill Creek	15	Boyne River	60
Carmila Creek	16	L. Glassford Creek	20
Cattle Creek	12	L. Ridler Creek	18
Clairview Creek	17	L. Degalgil Creek	26
St. Lawrence Creek	22	R. Norton Creek	9
Waverley Creek	24	R. Eastern Boyne River	16
Styx River	40	L. Futter Creek	24
L. Montrose Creek	14	R. Iveragh Creek	14
L. Granite Creek	22	Round Hill Creek	6
R. Tooloombah Creek	28	Baffle Creek	65
R. Stoodleigh Creek	14	R. Three Mile Creek	16
Herbert Creek	120	R. Banksia Creek	16
Fitzroy River	174	R. Granite Creek	40
R. Dawson River	312	R. Murray Creek	15
R. Hutton Creek	52	L. Euleilah Creek	14
R. Eurombah Creek	72	R. Bottle Creek	18
L. Kinnoul Creek	16	Littabella Creek	20
R. Juandah Creek	68	Kolan River	92
L. Palm Tree Creek	50	R. Gin Gin Creek	52
R. Cockatoo Creek	47	L. Yandaran Creek	13
R. Cracow Creek	14	Burnett River	250
R. Castle Creek	40	R. Splinter Creek	50

## APPROXIMATE LENGTHS OF PRINCIPAL RIVERS.

	MILES		MILES
Burnett River (continued)		Brisbane River (continued)	
R. Three Moon Creek ...	78	R. Anduramba or Ivory's Creek ...	30
R. Rawbelle River ...	65	R. Cressbrook Creek ...	36
R. Auburn River ...	60	R. Perseverance Creek ...	15
R. Boyne River ...	120	L. Crow's Nest Creek ...	8
R. Stuart River ...	68	L. Stanley River ...	54
L. Binjour Creek ...	14	L. Neurum Creek ...	10
R. Barambah Creek ...	130	R. Sandy Creek ...	18
L. Sunday Creek ...	34	R. Kilcoy Creek ...	15
R. Degilbo Creek ...	20	R. Sheep Station Creek ...	16
L. Perry River ...	28	L. Oaky Creek ...	9
L. St. Agnes Creek ...	18	L. Reedy Creek ...	14
Elliott River ...	28	R. Esk Creek ...	9
Burrum River ...	24	L. Northbrook Creek ...	12
L. Cherwell River ...	16	R. Lockyer Creek ...	56
L. Isis River ...	20	R. Murphy's Creek ...	10
L. Agnes Vale Creek ...	16	L. Alice Creek ...	15
L. Oaky Creek ...	15	R. Flagstone Creek ...	18
L. Gregory River ...	34	R. Ma Ma Creek ...	24
R. Sandy Creek ...	32	R. Tenthill Creek ...	24
Strathdees or Bulbi Creek ...	7	L. Blackfellows Creek ...	20
Mary River ...	165	R. Laidley Creek ...	34
L. Little Yabba Creek ...	17	L. Buaraba Creek ...	30
R. Obi Obi Creek ...	30	R. Bremer River ...	50
R. Belli Creek ...	12	L. Western Creek ...	14
L. Yabba Creek ...	52	R. Franklin Vale Creek ...	12
R. Skyring Creek ...	10	R. Warrill Creek ...	44
L. Kandanga Creek ...	33	R. Reynolds Creek ...	20
R. Traveston Creek ...	3	R. Purga Creek ...	22
L. Amamoor Creek ...	28	R. Deebling Creek ...	8
R. Six Mile Creek ...	16	R. Bundanba Creek ...	15
R. Deep Creek ...	10	R. Six Mile Creek ...	6
L. Pie Creek ...	12	R. Woogaroo Creek ...	12
L. Glastonbury Creek ...	18	R. Opossum Creek ...	6
L. Widgee Creek ...	27	L. Moggill Creek ...	12
R. Curra Creek ...	15	R. Oxley Creek ...	28
L. Wide Bay Creek ...	50	R. Norman Creek ...	6
L. Munna Creek ...	53	L. Breakfast Creek ...	10
L. Ooramera Creek ...	15	R. Bullimba Creek ...	16
R. Gutchy Creek ...	20	Tingalpa Creek ...	12
L. Myrtle Creek ...	19	Hilliard's Creek ...	8
L. Graham Creek ...	10	Eprapah Creek ...	8
R. Tinana Creek ...	68	Logan River ...	96
L. Saltwater Creek ...	10	L. Burnett's Creek ...	24
L. Susan River ...	14	R. Palen Creek ...	12
Tin Can Inlet ...	15	L. Tamrookum Creek ...	8
Noosa River ...	30	R. Christmas Creek ...	24
R. Kin Kin Creek ...	20	L. Knapps Creek ...	15
R. Cooloolthin Creek ...	7	R. Spring Creek ...	10
R. Ringtail Creek ...	4	L. Allan's Creek ...	20
Maroochy River ...	17	L. Teviot Brook ...	55
L. North Maroochy River ...	14	R. Scrubby Creek ...	8
L. Yandina Creek ...	10	R. Henderson's Creek ...	8
L. Coolum Creek ...	5	R. Albert River ...	54
R. Petrie Creek ...	14	R. Cainbale Creek ...	15
R. Eudlo Creek ...	9	R. Coburg River ...	30
Mountain Creek ...	8	R. Cedar Creek ...	12
Mooloolah River ...	20	Pimpama River ...	14
Caboolture River ...	26	Coomera River ...	35
L. Wararba Creek ...	12	Nerang River ...	34
Burpengary Creek ...	17	Mudgeeraba Creek ...	20
North Pine River ...	30	Tallebuggera Creek ...	15
R. Leacy Creek ...	9	Curumbin Creek ...	14
L. Terrors Creek ...	7	Severn River (to Tenterfield Creek)	48
R. Kobbie Creek ...	10	" (to Macintyre River)	20
L. Sideling Creek ...	8	R. Broadwater Creek ...	15
R. South Pine River ...	20	L. Quartpot Creek ...	14
R. Samford Creek ...	6	L. Bald Rock Creek ...	15
L. Cedar Creek ...	10	R. Pike Creek ...	65
R. Chinaman Creek ...	4	R. Alpin Creek ...	15
Cabbage Tree Creek ...	10	R. Brush Creek ...	28
Nundah Creek ...	8	R. Macintyre Brook ...	86
Serpentine Creek ...	7	L. Bracker Creek ...	30
Brisbane River ...	200	R. Canning Creek ...	34
R. West branch of Brisbane River	18	L. Catfish Creek ...	22
R. Cooyar Creek ...	64	Barwon or Macintyre River (along boundary	
L. Yarraman Creek ...	22	of State) ...	120
R. Taromeo Creek ...	15	R. Callandoon branch ...	50
L. Paradise Creek ...	6	R. Weir River ...	200
L. Avoca Creek ...	20	L. Western Creek ...	50
L. Monsildale Creek ...	30	L. Yarrill Creek ...	50
L. Kangaroo Creek ...	12	L. Commonon Creek ...	76
R. Emu Creek ...	60	R. Warrill Creek ...	22
R. Pierce's Creek ...	10	Little Weir River ...	16
L. Bum Bum Creek ...	10	Moonie River ...	215
R. Salty Waterholes Creek ...	12	L. Toombilla Creek ...	32
R. Nukinenda Creek ...	10	R. Parrie Moolan Creek ...	25
L. Spring Creek ...	10	R. Wongle Wongle Creek ...	28
L. Neara Creek ...	10	R. Farawell Creek ...	32



	MILES		MILES
Moonie River (continued)		ulloo River (continued)	
R. Teelba Creek	48	L. Blackwater Creek	42
R. Thomby Creek	24	R. Durella Creek	32
Narran River	32	R. Nickavilla Creek	36
Bokhara River	32	L. Winbin Creek	58
Balonne Minor River and Murri Murri	32	R. Coornil Paroo Creek	52
Balonne River	175	L. Goora Goora Creek	28
L. Condamine River	320	R. Moble Creek	60
R. Emu Creek	30	R. Moolianna Creek	44
R. Swan Creek	24	R. Gumbo Creek	52
L. Rosenthal Creek	28	L. Macintyre Creek	30
L. Sandy Creek	25	R. Neerebah Creek	10
R. Glengallan Creek	25	R. Pitteroo Creek	36
R. Dalrymple Creek	35	Warry Warry Creek	50
R. King's Creek	45	Cooper's Creek	270
L. Thane's Creek	35	R. Thomson River	240
L. Canal Creek	35	L. Cornish Creek	44
L. Spiers Creek	15	R. Tower Hill Creek	38
R. North branch Condamine River	50	R. Landsborough Creek	116
R. Oaky Creek	60	R. Bangall Creek	64
R. Myall Creek	50	R. Bradley Creek	46
R. Jimbour Creek	45	L. Aramac Creek	82
L. Wilkie Creek	40	L. Black Gin Creek	48
L. Braemar Creek	18	L. Wellshot Creek	24
R. Cooranga Creek	40	L. Ernestine Creek	32
L. Kogan Creek	28	R. Darr River	100
R. Jingi Jingi Creek	50	R. Maneroo Creek	64
R. Charley Creek	46	R. Catherine Creek	64
L. Wambo Creek	45	L. Tocal Creek	36
L. Wieambilla Creek	22	R. Acheron Creek	38
L. Undulla Creek	56	R. Vergemont Creek	116
L. Bagot Creek	12	R. Warbreccan Creek	36
L. Cobbegum Creek	20	R. Carella Creek	36
L. Murilla Creek	32	L. Bostock Creek	40
R. Dogwood Creek	120	R. Wurungla Creek	48
R. Bottle-tree Creek	18	L. Barcoo River	310
R. Wallan Creek	30	R. Birkhead Creek	36
L. Coolumboola Creek	20	L. Macfarlane Creek	36
R. Drillham Creek	20	L. Boree Creek	44
R. Dulacca Creek	28	L. Ravensbourne Creek	72
R. Tchanning Creek	68	R. Douglas Ponds Creek	56
R. Yuleba Creek	82	R. Alice River	144
R. Wallumbilla Creek	52	L. Jordan Creek	64
L. Griman Creek	20	R. Lagoon Creek	28
R. Bungil Creek	92	L. Patrick Creek	40
R. Yalabone Creek	52	L. Thornleigh Creek	68
L. Weribone Creek	10	R. Wild Horse Creek	52
R. Cogoon Creek	42	L. Fallundilly Creek	48
L. Donga Creek	34	L. Pemburley Creek	30
R. Tartulla Creek	38	L. Minster Creek	20
R. Maranoa River	275	L. Powell Creek	90
R. Western branch	36	L. Wombunderry Channel (or Eastern branch)	116
R. Billin Creek	30	L. Tooratchie Creek	24
L. Merrivale River	96	L. Wilson River	190
L. Apple-tree Creek	30	Brown's Creek	36
R. Mannandilla Creek	40	Diamantina River	468
L. Basalt Creek	18	L. Western River	84
R. Womalilla Creek	40	R. Oondooroo Creek	28
L. Amby Creek	36	R. Mills Creek	72
Ballandool River	40	L. Mistake Creek	36
R. Briarie Creek	24	L. Lydia Creek	20
Culgoa River (Queensland portion)	70	R. Wokingham Creek	90
R. Wallam Creek	184	L. Cameron Creek	24
L. Neabul Creek	36	R. Cadell Creek	72
R. Mungallala Creek	245	L. Kell Creek	36
R. Nebine Creek	176	L. McBride Creek	40
L. Patterson Creek	80	R. Mackunda Creek	68
R. Widgegoara Creek	120	L. Mayne River	100
Noorama Creek	115	L. Binburi Creek	32
Thurrulgoonia Creek	50	R. North Creek	44
Blackfellow Creek	32	L. Eden Creek	32
Tuen Creek	32	L. Edkins Creek	48
Owangowan Creek	14	L. Farrar's Creek	200
Warrego River (Queensland portion)	365	Eyre Creek	260
R. Nive River	112	R. Georgina River (including the part in South Australia)	368
R. Ward River	115	L. Buckley River	88
R. Langlo River	112	L. Templeton River	100
L. Angellala River	136	L. Yaringa Creek	72
R. Nemunmulla Creek	60	L. Moonah Creek	88
Cuttaburra Creek	64	L. St. Ronans Creek	50
Paroo River	228	R. Pituri Creek	40
L. Quilberry Creek	36	L. Burke River	160
R. Beechal Creek	70	L. Mort River	52
L. Mirraparoo Creek	36	R. Wills Creek	92
R. Yowah Creek	60	L. Hamilton River	160
Mirintu Creek	48	R. Mulligan River	192
Titheroo Creek	24		
Booka Booka Creek	32		
Bulloo River	370		

5D. **South Australia.**—Starting at the south-eastern extremity and going westerly and northerly.

	MILES.		MILES.
Murray River (South Australian portion) ...	400	Hindmarsh River ...	15
Onkaparinga River ...	60	Inman River ...	17
Stuart River ...	17	Cygnet River ...	38
Torrens River ...	50	Willochra River ...	110
Little Para Creek ...	20	Pasmore River ...	100
Gawler River ...	80	Frome River ...	150
Light River... ..	100	Clayton River ...	55
Wakefield River ...	65	Cooper or Barcoo River (S.A. portion) ...	300
Broughton River ...	90	Warburton River (S.A. portion) ...	275
Tod River ...	26	Treuer or Macumba River ...	145
Bremer River ...	40	Neale's River ...	200
Angas River ...	26	Officer River ...	100
Finniss River ...	30		

5E. **Northern Territory.**—Starting at the north-eastern extremity and going westerly and southerly.

McArthur River ...	125	South Alligator River ...	100
Limmen Bight River ...	140	Mary River ...	100
Roper River ...	260	Adelaide River ...	110
R. Strangway's River ...	85	Daly River ...	225
L. Chambers Creek ...	85	Fitzmaurice River ...	100
R. The Birdum Creek ...	120	Victoria River ...	350
Goyder River ...	90	L. Wickham River ...	75
Liverpool River ...	80	L. Gordon River ...	65

5F. **Western Australia.**—Starting at north-eastern extremity and going westerly, southerly, and easterly.

Ord River... ..	300	Ashburton River (continued)	
L. Bow River... ..	80	R. Duck River ...	75
Pentecost River ...	50	R. Hardey River ...	135
L. Chamberlain River ...	125	Lyndon River ...	140
Durrack River ...	160	Gascoyne River ...	475
Drysdale River ...	275	R. Lyons River ...	225
King Edward River ...	150	Wooramel River ...	150
R. Carson River ...	85	Murchison River ...	440
Moran River ...	50	L. Sanford River... ..	110
Isdell River ...	115	L. Roderick River ...	80
Lennard River ...	165	Greenough River ...	170
Fitzroy River ...	325	Moore River ...	100
L. Jurgurra River ...	90	Swan River (upper portion called Avon Riv.) ...	240
L. Christmas River ...	165	L. Helena River ...	40
L. Margaret River ...	430	Murray River ...	70
R. Adcock River ...	75	Collie River ...	60
R. Hann River ...	130	Preston River ...	40
De Grey River ...	190	Blackwood River ...	190
L. Shaw River ...	135	Warren River ...	55
L. Coorgan River ...	110	Frankland River ...	80
R. Oakover River ...	180	Kalgan River ...	65
Turner River ...	75	Pallinup River ...	75
Yule River ...	140	Cairdner River ...	70
Fortescue River ...	340	Fitzgerald River ...	40
Robe River ...	75	Phillips River ...	45
Cane River ...	65	Oldfield River ...	50
Ashburton River ...	220	Young River ...	40
L. Henry River ...	75	Lort River ...	50

5G. **Tasmania.**—Starting at the north-eastern extremity and going westerly, southerly, easterly, and northerly.

Ringarooma River ...	62	Franklin River ...	16
Boobyalla River ...	26	Rubicon River ...	92
Tomahawk River... ..	16	Mersey River ...	60
Great Forester River ...	38	L. Dasher River ...	17
Brid River ...	26	Don River ...	20
Little Forester River ...	27	Forth River ...	52
Piper's River ...	30	L. Dove River ...	14
Tamar River (formed by junction of North and South Esks) ...	40	Gawler River ...	15
North Esk River ...	45	Laven River ...	50
R. St. Patrick's River... ..	30	Blythe River ...	30
South Esk River ...	120	Emu River ...	24
L. Lake River ...	45	Cam River ...	25
L. Macquarie River ...	73	Inglis River ...	25
R. Elizabeth River ...	35	Detention River ...	15
R. Nile River ...	25	Black River ...	16
R. Ben Lomond River ...	18	Duck River ...	17
L. St. Paul River ...	28	Montague River ...	23
		Welcome River ...	14

	MILES		MILES
Arthur River ... ..	63	Old River ... ..	16
L. Frankland River ... ..	27	Lune River ... ..	16
L. Helder River ... ..	24	Esperance River ... ..	14
L. Hellyer River ... ..	23	Huon River ... ..	105
Pieman River (formed by junction of the		R. Picton River ... ..	30
Murchison and Mackintosh Rivers)	40	Derwent River ... ..	107
Mackintosh River ... ..	22	L. Jordan River ... ..	58
Murchison River ... ..	23	R. Styx River ... ..	22
Little Henty River ... ..	14	R. Russell's Falls River ... ..	24
Henty River ... ..	25	L. Clyde River ... ..	45
King River ... ..	31	L. Ouse River ... ..	62
Gordon River ... ..	90	L. Dee River ... ..	20
R. Franklin River ... ..	61	L. Nive River ... ..	40
L. Sprent River ... ..	23	Coal River ... ..	40
R. Denison River ... ..	31	Carlton River ... ..	16
L. Wedge River ... ..	16	Prosser River ... ..	25
Spero River ... ..	22	Little Swanport River ... ..	33
Wanderer River ... ..	16	Lisdillon River ... ..	12
Mainwaring River ... ..	18	Meredith River ... ..	13
Rocky River ... ..	18	Swan River ... ..	22
Giblin River ... ..	14	Apsley River ... ..	16
Davey River ... ..	23	Scamander River ... ..	16
R. Hardwood River ... ..	22	George River ... ..	29
Spring River ... ..	18	Anson River ... ..	22
North River ... ..	14	Great Mussel Roe River ... ..	31

(ii.) *Lakes.* The "lakes" of Australia may be divided into three classes, viz., (a) true permanent lakes; (b) lakes which being very shallow, become mere morasses in dry seasons, or even dry up and finally present a cracked surface of salt and dry mud, and (c) lakes which are really inlets of the ocean, opening out into a lake-like expanse.

The second class (b) is the only one which seems to demand special mention. These are a characteristic of the great central plain of Australia. Some of them (*e.g.*, Lake Torrens, Gairdner, Eyre, Frome) are of considerable extent.

(iii.) *Artesian Areas.* A considerable tract of the plain country of New South Wales and of Queensland carries a water-bearing stratum, usually at a great depth. A large number of artesian bores have been put down, from which there is now a considerable efflux. These are of great value, and render large areas available which otherwise would be difficult to occupy even for pastoral purposes. Western Australia has also an artesian area of considerable magnitude.

The distribution of the rivers and lakes, and the approximate boundaries of the artesian basin, are shewn on the accompanying map.

The statistics relating to artesian bores will be given *in extenso* hereinafter, viz., in the section dealing with Water Conservation.

6. *Orography.*—Owing to the absence of any very high mountain chains, and to the great depression in the centre of Australia, the average elevation of the Australian continent over the level of the surrounding oceans is less than that of any of the other continents. This average, however, has not yet been estimated with any degree of precision.

(i.) *General Description of the Surface.* A section through the continent from east to west, at the point of its greatest breadth, shews first a narrow belt of coastal plain. This plain, extending north and south along the whole eastern coast, is well watered by rivers. Of variable width, seldom more than sixty or seventy miles, and occasionally only a few miles or disappearing altogether, its average may, nevertheless, be taken as about forty to fifty. From this the Great Dividing Range, or Australian Highlands, extending from the north of Queensland to the south of New South Wales, and thence sweeping westward through Victoria, rises often sharply, and frequently presents bold escarpments on its eastern face. The descent on its western slopes is gradual, until in the country to the north of Spencer's Gulf the plain is not above the sea-level, and occasionally is even below it. Then there is another almost imperceptible rise until the mountain ranges of Western Australia are reached, and beyond these another strip of coastal plain.

The great central plain is the most distinctive feature of the Australian continent, and its climatic peculiarities are doubtless to be largely ascribed thereto.

(ii.) *Mountain Systems.* The main mountain feature of Australia is the Great Dividing Range, which runs along the whole eastern coast of the continent, and can be